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MEASURING THE SOCIAL COSTS AND BENEFITS AND IDENTIFYING THE VICTIMS OF SUBORDINATING SECURITY INTERESTS IN BANKRUPTCY

Steven L. Harris & Charles W. Mooney, Jr.†

INTRODUCTION

In recent years, some legal scholars have questioned the utility and fairness of security interests and the favorable treatment afforded security interests in bankruptcy. More recently, a few have made concrete proposals for subordinating security interests to tort and other claims in bankruptcy. Unlike many earlier theoretical explorations of secured debt, the subordination proposals acknowledge that evaluating the effects of affording priority to secured claims in bankruptcy turns on the answers to a number of difficult empirical questions. As of yet, however, none of the subordination proponents has addressed these questions in any detail.

In this Article, we suggest several approaches for quantifying the major social costs and benefits likely to result from adoption of a subordination proposal. In particular, we focus on the costs of contractions in the amount of credit that would be extended if a subordination proposal were enacted into law. We also consider claims that affording priority to secured claims in bankruptcy promotes inefficient, less prudent conduct.

I

THE SUBORDINATION PROPOSALS

Since 1994, no one has seriously questioned that at least some secured transactions provide benefits that offset any costs imposed on a debtor's unsecured creditors.¹ One finds evidence of this recogni-

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¹ Paul Shupack should be credited with an early explanation of this insight. Paul M. Shupack, *Solving the Puzzle of Secured Transactions*, 41 *RUTGERS L. REV.* 1067, 1093-1121 (1989).

tion in at least three of the articles that appeared in a symposium issue of the *Virginia Law Review* in 1994.² One benefit probably is the most obvious: security can facilitate extensions of credit that creditors otherwise would not make, and debtors can use the credit extended to create wealth. Stated otherwise, the institution of secured credit is not *necessarily* harmful to unsecured creditors as a class. For example, secured credit that enables a debtor to pay unsecured creditors for goods and services or that reduces a debtor's risk of insolvency can benefit those creditors. Consider, as well, that those business debtors that become insolvent while leaving material debts unpaid are, we suspect, a distinct minority. The net effect of secured credit on unsecured creditors is an empirical issue that remains to be demonstrated conclusively.³

² David Gray Carlson, *On the Efficiency of Secured Lending*, 80 VA. L. REV. 2179, 2181-98 (1994); Steven L. Harris & Charles W. Mooney, Jr., *A Property-Based Theory of Security Interests: Taking Debtors' Choices Seriously*, 80 VA. L. REV. 2021, 2025-47 (1994); Lynn M. LoPucki, *The Unsecured Creditor's Bargain*, 80 VA. L. REV. 1887, 1892-1923 (1994). Volume 80:8 of the *Virginia Law Review*, in which these articles appear, contains the papers and commentary delivered at a 1993 conference in Charlottesville commemorating the commencement of the project to revise UCC Article 9.

³ In their recent article, Lucian Bebchuk and Jesse Fried acknowledge the central role of empirical questions concerning the costs and benefits of secured credit. Lucian Arye Bebchuk & Jesse M. Fried, *The Uneasy Case for the Priority of Secured Claims in Bankruptcy*, 105 YALE L.J. 857, 913-29 (1996). In our article, we explained:

In the absence of empirical data it is . . . impossible to conclude whether giving security *generally transfers wealth from unsecured creditors to secured creditors*. Research that focuses only on creditors of debtors that actually become insolvent cannot possibly answer the question; everyone knows that collateral provides a comparative advantage to the secured creditor in that situation.

Harris & Mooney, *supra* note 2, at 2036 (emphasis added). In his recent study, Steven Schwarcz refined our point in arguing that secured credit often is beneficial to unsecured creditors:

This Article . . . adopts a new term, "class Pareto efficiency," reflecting that the proper unit of analysis is the class and not the individual. A transaction is class Pareto efficient if it is Pareto efficient when viewing each class of persons affected by the class of transactions as a single collective person. . . . Class Pareto efficiency is therefore a useful way of assessing the policy impact of an action on affected groups, such as the policy impact of secured credit on unsecured creditors.

New money secured credit appears to be class Pareto efficient, and therefore efficient from a policy standpoint Unsecured creditors as a class [are] better off because the availability of secured credit increases debtor liquidity and therefore increases the expected value of unsecured claims.

Steven L. Schwarcz, *The Easy Case for the Priority of Secured Claims in Bankruptcy*, 47 DUKE L.J. (forthcoming Dec. 1997) (July 3, 1997 manuscript at 62-63, on file with authors); see also Ronald J. Mann, *The Role of Secured Credit in Small Business Lending*, 86 GEO. L.J. (forthcoming 1997) (Feb. 24, 1997 manuscript at 45-47, on file with authors) (expressing doubt that secured financing is materially adverse to the interests of unsecured creditors).

This Part offers a brief overview of three articles that argue in favor of subordinating secured claims to tort claims and certain other claims.

In his 1991 article, David Leebron explored proposals to eliminate limited liability for corporate shareholders.⁴ The kernel of his analysis recognized that limited liability permits corporations to externalize risk, with the result that corporations engage in behavior that is inefficient—i.e., too risky.⁵ Tort victims bear the risk and costs of this negative externality.⁶ Leebron also pointed out that the same result occurs by virtue of the treatment of debt in insolvency proceedings, inasmuch as unsecured debt receives *pari passu* treatment with tort claims.⁷ And, he explained, the priority afforded to secured claims exacerbates the problem.⁸ Consequently, he called for the subordination of both secured and unsecured claims to tort claims on efficiency grounds.⁹

There are both useful insights in and powerful arguments against Leebron's proposal. For present purposes, however, two points are sufficient. First, Leebron's proposal is designed to provide incentives that will induce optimal (efficient) risk and care on the part of commercial actors. It is not his purpose either to increase compensation to tort victims or to maximize recoveries by other unsecured creditors. Although Leebron's conclusions have been cited by those who find fault with the existing secured-credit regime on distributional grounds,¹⁰ Leebron's normative principle is efficiency, not "fairness" or "distributive justice." Second, Leebron does not appear to take seriously the possibility that unsecured creditors might benefit from affording priority to secured claims.¹¹

⁴ David W. Leebron, *Limited Liability, Tort Victims, and Creditors*, 91 COLUM. L. REV. 1565 (1991) (suggesting, but ultimately rejecting, the idea).

⁵ *Id.* at 1570-74.

⁶ *See id.* at 1574, 1600-05.

⁷ *Id.* at 1637-40.

⁸ *Id.* at 1646-49.

⁹ *Id.* at 1650. Leebron was not the first to suggest this possibility. *See* Henry Hansmann & Reinier Kraakman, *Toward Unlimited Shareholder Liability for Corporate Torts*, 100 YALE L.J. 1879, 1902 & n.66 (1991) (suggesting, but ultimately rejecting, the idea).

¹⁰ *See* LoPucki, *supra* note 2, at 1888-89 ("The institution of security has a . . . bad reputation. Its most persistent image is that of families forced from home or farm through foreclosure. Most noneconomists wish that things could be different. We are rooting for the underdog, which means we are rooting against security.") (footnote omitted).

¹¹ One might think that so long as the security granted does not exceed the value transferred to the debtor, the tort victim does not lose, and indeed might gain. But as Alan Schwartz has demonstrated, this proposition is dubious and depends on the unrealistic assumption that the funds will be invested in a project that is risk free or yields returns that are negatively correlated with the other businesses of the borrower.

Leebron, *supra* note 4, at 1646-47 (citing Alan Schwartz, *A Theory of Loan Priorities*, 18 J. LEGAL STUD. 209, 228-34 (1989)). As David Carlson has pointed out, Schwartz's model

In his *Virginia Law Review* article, Lynn LoPucki built on Leebron's analysis in urging the subordination of security interests to tort creditors in bankruptcy.¹² Like Leebron, LoPucki grounded his proposal largely on the argument that forcing debtors to internalize the costs of injury to others will induce debtors to reduce the amount of tortious injury they cause.¹³ He argued that affording priority to tort and surprised, consensual, unsecured creditors would cause secured creditors to monitor debtors in a way that would make debtors behave more carefully and therefore commit fewer torts.¹⁴ LoPucki also suggested, as did Leebron, that current law, which affords security interests priority over tort claims, permits the debtor to externalize its costs.¹⁵ As the proportion of a firm's assets provided by debt increases, the proportion invested by the shareholders decreases, thereby reducing the shareholders' risk and placing the risks on creditors. By enabling secured creditors to receive the firm's assets ahead of tort creditors, current law eliminates any incentive for secured creditors to monitor the safety of the debtor's operations and products. This, the argument goes, results in less care and more torts.¹⁶ Although Leebron explained that the *pari passu* treatment of consensual unsecured creditors and tort claims has the same, but less pronounced effects,¹⁷ LoPucki did not advocate subordination of all contractual, nontort claims to tort claims.

Unlike Leebron, LoPucki confronted countervailing considerations, including the proposed system's impact on the cost and availability of credit.¹⁸ But LoPucki resolved the empirical problem to his satisfaction by imagining a market-based solution: tort priority insurance—a product that insurers would develop and offer in response to demands from secured parties wishing to insure themselves against loss of their collateral to tort claimants.¹⁹

always assumes that the proceeds of secured loans immediately disappear. David Gray Carlson, *Secured Lending as a Zero Sum Game* 21-22 (1997) (unpublished manuscript, on file with authors).

¹² LoPucki, *supra* note 2, at 1908-14. LoPucki also urged subordination of security interests to certain unsecured claims held by consensual, nontort creditors. *Id.* at 1947-63. Asserting that the risks imposed by their debtors' secured debt unfairly surprise a material portion of consensual creditors, he proposed to subordinate security interests to the claims of every unsecured consensual creditor unless 1) the secured party actually brought the existence of the security interest to the attention of the prospective unsecured creditor, or 2) the unsecured creditor reasonably should have expected the existence of the security interest. *Id.* LoPucki's empirical assumption about the widespread surprise of unsecured creditors seems implausible, at best.

¹³ *Id.* at 1897-99.

¹⁴ *Id.* at 1911-14.

¹⁵ *Id.*

¹⁶ *See id.*

¹⁷ Leebron, *supra* note 4, at 1639-40.

¹⁸ LoPucki, *supra* note 2, at 1911-12.

¹⁹ *Id.* at 1912-13.

In their recent article in the *Yale Law Journal*, Lucian Bebchuk and Jesse Fried have attempted a more complete analysis of the effects of legal rules governing priority, which generally afford secured creditors priority over tort creditors and other "nonadjusting" creditors,²⁰ and the potential effects of subordinating security interests to tort and other nonadjusting creditors' claims. They offer alternative proposals. One would subordinate security interests generally and fully to all nonadjusting claims in bankruptcy.²¹ The other would treat a fixed, statutorily imposed fraction (their example is 25%) of the secured claim as an unsecured claim in bankruptcy.²²

Bebchuk and Fried, like Leebron and LoPucki before them, base their arguments on efficiency.²³ Like LoPucki, and in contrast to Leebron, Bebchuk and Fried pay attention to positive as well as negative externalities.²⁴ They identify externalities heretofore overlooked or given little acknowledgment.²⁵ However, we question their conclusions and empirical assumptions, especially those concerning economic benefits of credit that would be extended under current law but that would not be extended were one of their proposals adopted.

Two recent works in progress offer critiques of the Bebchuk and Fried article. Steven Schwarcz develops arguments that we had previously made in the *Virginia Law Review* to the effect that secured credit

²⁰ By "nonadjusting" creditors, the authors mean creditors that are unable, or that rationally decline, to adjust the amount of credit they extend or the amount they charge for credit to take into account risks imposed by the creation of security interests in favor of other creditors. The category of "nonadjusting" creditors includes suppliers whose claims are too small to warrant making adjustments and governmental entities holding claims for taxes. Bebchuk & Fried, *supra* note 3, at 864-65.

²¹ See *id.* at 905-09.

²² See *id.* at 909-11. They appear to favor the fixed-fraction approach. *Id.* at 910-11 ("Although a rule such as the 75% fixed-fraction rule would reduce but not eliminate the inefficiencies identified in this Article, it might be preferable to the adjustable-priority rule because it would create less uncertainty for secured creditors and would be somewhat easier to administer."). The terms "secured claim" and "unsecured claim" have the meaning ascribed to them in the Bankruptcy Code. See *id.* at 859 n.1 (citing 11 U.S.C. § 506(a) (1994)). Thus, an oversecured creditor—one whose collateral has a value in excess of the amount of its claim—holds a secured claim equal to the amount of the claim, whereas an undersecured creditor—one whose claim exceeds the value of its collateral—holds a secured claim equal to the value of the collateral and an unsecured claim for the balance.

²³ Having identified the efficiency costs associated with full priority, we also have considered the desirability of a different approach—according only partial priority to secured claims. Our analysis of partial priority has shown that such a rule could eliminate or reduce these efficiency costs—and that such an approach may well be more efficient than the full-priority rule. *Id.* at 934.

²⁴ *Id.* at 913-21 (discussing negative externalities of partial priority, i.e., positive externalities of full priority, including increased information acquisition costs, increased cost of coordinating monitoring efforts, and reduced financing for desirable activities).

²⁵ *Id.* at 895-903 (discussing inefficient security interests, distorted choices between security and covenants, distorted investment and precaution decisions, suboptimal use of covenants, and suboptimal enforcement efforts).

can facilitate credit that otherwise would not be extended and that this credit can create wealth and reduce the likelihood of default.²⁶ He goes on to explain why firms may be reluctant to give security and how secured credit can provide needed liquidity for troubled but viable firms that are unable to borrow on an unsecured basis.²⁷ He also explains in detail how granting full priority to secured credit can increase the expected value of unsecured claims.²⁸ David Carlson also criticizes Bebchuk and Fried's conclusions and methodology.²⁹ He points out that, notwithstanding their more detailed explanations, Bebchuk and Fried actually add little to the debate on secured credit.³⁰ Carlson argues that, by positing secured credit as a zero-sum game and by conflating wealth transfers with social gains and losses, Bebchuk and Fried make the same mistakes as several earlier authors.³¹

This brief overview suggests some important implications for scholarship and law-reform agendas alike. First, the subordination proposals are based on efficiency grounds. Others may make a normative claim that it simply is "unfair" to elevate secured claims over those of tort claimants and other nonadjusting creditors, *even if the subordination of security interests were inefficient and would reduce aggregate wealth*. But that normative claim will draw no support from these proposals.

²⁶ Schwarcz, *supra* note 3 (manuscript at 18-21).

²⁷ *Id.* (manuscript at 22-26). Of course, as we stressed in our article, providing liquidity for troubled firms is only one illustration of the contexts in which credit would be available only on a secured basis and can be used to create wealth. Harris & Mooney, *supra* note 2, at 2025-45.

²⁸ Schwarcz, *supra* note 3 (manuscript at 43-58).

²⁹ Carlson, *supra* note 11 (manuscript at 57-79).

³⁰ *Id.* (manuscript at 58, 79).

³¹ Bebchuk and Fried claim to have demonstrated that some security interests are efficient and some are not. They make no attempt to quantify whether the efficient security interests predominate, or whether the inefficient ones predominate. Indeed, at one point they suggest that not even firms who issue security interests . . . know whether security interests will affect the market value of their own assets. Given such a lack of knowledge, there is no sense in trying to make policy on the basis of wealth maximization. To do so would be irresponsible and unscientific. . . .

Nevertheless, in spite of their lack of theoretical grounding, Bebchuk and Fried do not hesitate to offer two policy suggestions. First, they suggest that secured claims be subordinated only to those creditors who have been exposed to uncompensated risk. Second, they suggest that all secured claims be taxed by 25% in bankruptcy proceedings in order to make secured credit more risky.

. . . .

In effect, Bebchuk and Fried started to build an investment model. In the middle of doing so, they forgot their premises and reverted back to the zero sum baseline, in which all investments have already taken place. This unacknowledged shift to premises completely invalidates their findings.

Id. (manuscript at 69-70, 78).

Second, these proposals suggest a rich field in which legal scholars may join hands with those in other disciplines to study credit. Testing more fully the empirical assumptions and hypotheses that underlie these and other proposals will be difficult, but may be both rewarding and surprising. It will require more serious consideration of the direct and indirect economic effects of extensions of credit that solvent and insolvent debtors in fact repay. And it will require study of those insolvent debtors that resolve their financial affairs outside of bankruptcy.

As long as bankruptcy debtors are a small minority not only of all debtors but of insolvent debtors as well, narrowly focusing only on bankruptcy debtors will teach little about the full effects of secured credit. Bankruptcy rules have consequences outside bankruptcy, especially in the process of credit extension. No one could believe that everything in the credit markets would remain constant under subordination rules *except* that secured creditors would hand over money to unsecured creditors in bankruptcy proceedings. In particular, we are wary of assertions that professional secured creditors oppose the subordination proposals because the proposals' adoption would take wealth from them and give it to unsecured creditors. Imposition of a subordination regime may, in fact, increase the aggregate losses that secured creditors suffer in insolvency proceedings. But secured creditors are likely to react to subordination rules by taking the new rules into account when assessing their risks and making business decisions. Once the dust settles, secured creditors may find that their returns have not been adversely affected.

There is one way, of course, that some secured creditors could lose under the subordination proposals. Secured creditors that can exploit a market position to extend secured credit profitably under current law might lose profits under a regime that would materially contract their extensions of credit. Their alternative sources of investment may be less profitable. However, the bigger losers would be those debtors that would receive less funding and those others that would, consequently, be prevented from entering into transactions with those debtors. If this account is accurate, then those who view current law as "pro-secured creditor" necessarily must view current law as even more "pro-debtor."³²

³² See, e.g., Anthony Saunders & Ingo Walter, Annotated Project Outline, Proposed Convention on Security Interests in, and Transfers and Leasing of, Aviation Mobile Equipment: Economic Impact Assessment 30-33 (June 25, 1997) (unpublished manuscript, on file with authors) (estimating, based on stock market data, that recent clarifications to Bankruptcy Code § 1110, which affords certain financiers and lessors of transportation equipment enhanced rights to be paid currently or to take possession of the equipment, increased the capitalized future earnings for the four airlines included in the Standard & Poor's airline index (i.e., debtors and lessees) by \$442.8 million, or 4.65% of the previous

II

ESTIMATING THE SOCIAL COSTS OF THE SUBORDINATION
PROPOSALS

In this Part we consider how two significant effects of the subordination proposals might be quantified. We suggest a research agenda, not definitive conclusions. We first consider the costs of contractions of credit extensions, including the costs imposed on debtors' unsecured creditors, that would result from adopting the subordination proposals as measured against the resulting benefits for unsecured creditors (i.e., larger distributions). Second, we consider the argument that subordinating secured claims would reduce a negative externality that current law creates—the inducement of debtors to externalize risk, resulting in more risky behavior.

A. Costs of Credit Contractions and Benefits of Increased Distributions

Our article in the *Virginia Law Review* explains how secured credit may benefit unsecured creditors generally, although it has the effect of subordinating unsecured claims against debtors that enter bankruptcy.³³ One major benefit is the facilitation of credit that creditors otherwise would not extend. We hypothesize that adopting the subordination proposals would materially reduce credit available to distressed businesses, and that the costs of the credit contraction would swamp the benefits of increased distributions in bankruptcy for the promoted classes of creditors.³⁴

In his work in progress, Steven Schwarcz explains why credit might be available to an insolvent debtor only on a secured basis and

equity value of the airlines). These authors also observed: "It should be noted that the upgrade of airline debt and its commensurate reduction in financing costs attributable to the proposed Convention for non-U.S. airlines is likely to be significantly greater than the upgrade attributable to the Bankruptcy Reform Act's clarification of Section 1110 in the United States." *Id.* (manuscript at 33). The Convention to which the authors refer is the Draft Convention on International Interests in Mobile Equipment, which would cover security interests in and leases of high-value mobile equipment such as aircraft, railroad rolling stock, satellites, and ships. The International Institute for the Unification of Private Law, in Rome, sponsors work on the Convention.

³³ In brief, our *Virginia Law Review* article explains that debtors may have access to more credit under the existing legal regime, which validates secured transactions, than they would if all credit were unsecured. We argue that the additional credit may increase the expected value of unsecured claims by, *inter alia*, reducing the probability of the debtor's default, providing a source of repayment to unsecured creditors, and enabling the debtor to remain in business and conclude future transactions. Harris & Mooney, *supra* note 2.

³⁴ It is implausible to assume that risk-neutral lenders would be willing to extend the same amount of credit, but with an increased risk premium. As Paul Shupack has explained, "[a]t some level of risk, the model [of secured lending] must allow otherwise risk-neutral creditors to cease lending." Shupack, *supra* note 1, at 1097.

how a subordination regime "would create an economic disincentive that would cause many potential lenders simply to refuse to make loans to debtors."³⁵ Contractions in available credit might also come in the form of loans made in a smaller amount. The conventional wisdom in the credit markets supports our hypothesis that the contraction of credit is likely to be material, inasmuch as subordination of a security interest would diminish the collateral value on which a secured lender could rely.³⁶

Estimating the *aggregate costs of credit contraction* that one could expect from adopting the subordination proposals would require an initial estimate of the *aggregate amount of credit contraction*. Upon settling on an estimate of the latter sum, it would then be possible to estimate, by using a multiplier based on a variety of economic assumptions,³⁷ the aggregate costs. These costs then could be compared with the *aggregate amount of increased distributions* in insolvency proceedings (or otherwise) that would flow from adoption of the subordination proposals.³⁸ In each case, assumptions as to the precise subordination formula—e.g., subordinate secured claims to tort claims, subordinate secured claims to the claims of nonadjusting creditors, or treat 25% of the secured claim as unsecured—would influence the estimates. In reality, we doubt that anyone could generate a meaningful estimate of the actual amounts of these costs and benefits for the entire United States (or any other) economy. For example, even with complete and accurate data on distributions in bankruptcy, how would one accurately take into account costs arising out of informal negotiations in the shadow of bankruptcy priority rules? Although developing a

³⁵ See Schwarcz, *supra* note 3 (manuscript at 36).

³⁶ See, e.g., Joe Rizzi, *Gauging Debt Capacity*, CORP. CASHFLOW, Feb. 1994, at 33, 34 ("Asset-based lending can increase the debt capacity of middle-market or noninvestment-grade firms with strong tangible asset bases but low or volatile cash flow streams. Standard advance rates against eligible accounts receivable, inventory and net property, plant and equipment are 80%, 50% and 40%, respectively."); see also Jim Embree, *Commercial Loan Risk Ratings for Collateral and Control*, BUS. CREDIT, July-Aug. 1995, at 12 (explaining how collateral is rated according to its liquidity, marketability, and value, and how the rating affects the availability of credit). Some disagree with the conventional wisdom. See Ronald J. Mann, *Strategy and Force in the Liquidation of Secured Debt*, 96 MICH. L. REV. (forthcoming Nov. 1997) (Apr. 29, 1997 manuscript at 81-82, on file with authors) (reporting that 1) an insurance company executive was not confident that adoption of a fixed-fraction subordination proposal applicable both in and out of bankruptcy would have a significant long-term effect on the amount of credit extended, and 2) a banking executive predicted that adoption would have no effect whatsoever on bank lending).

³⁷ One might assume, for example, that the supply of credit is sufficient to provide an appropriate amount of credit to creditworthy borrowers.

³⁸ As with an estimate of wealth losses arising out of contractions of credit, an estimate of wealth gains from increased distributions in insolvency proceedings would require assumptions concerning the uses to which the distributions would be put. Wealth transfers alone do not represent wealth increases and do not have any necessary efficiency implications.

meaningful estimate of aggregate amounts may not be possible, estimating the *relative* amounts of the costs of credit contraction and benefits of increased distributions in identified samples may be. There are several plausible approaches.³⁹

Initially, it will be necessary to identify market segments in which anecdotal evidence and common knowledge indicate that secured credit plays an important role. Examples are the markets for financing agricultural production, the acquisition of commercial aircraft and other equipment, credit secured by financial assets such as securities (at both the wholesale and retail levels), securitization transactions, and credit for small commercial, retail, and industrial businesses. The next step will be to identify a manageable sample. Possibilities abound. Some industries may collect data concerning their members that is available for the asking. One also could use questionnaires and interviews to survey relevant samples of market participants. Analyses of the records of a sample of lenders with large and diverse portfolios also might be useful. Those records and portfolios also would support the study and analysis of data concerning the borrowers who do not default, recoveries from those who do default, the incidence of default, denials of credit, lending policies involving loan-to-collateral ratios, results of nonbankruptcy workouts, and the like.⁴⁰

Another approach would draw from available data to create manageable predictions.⁴¹ For example, assume one identifies a market segment with 1000 firms, each holding assets valued at \$125,000 and

³⁹ Among the approaches we do not explore is to compare data from an economy with a functional personal property security regime to data from an economy without one. For example, recent studies by the World Bank predict that Bolivia's adoption of an effective personal property security law would cause interest rates to decrease and credit availability to increase, thereby resulting in a social gain equal to as much as two percent of the Bolivian gross domestic product. See Heywood W. Fleisig et al., *Legal Restrictions on Security Interests Limit Access to Credit in Bolivia*, 31 INT'L LAW. 65, 70 (1997); see also Saunders & Walter, *supra* note 32 (manuscript at 33) (discussing the favorable economic impact on non-United States airlines that would result from improving the effectiveness of personal property security laws).

⁴⁰ In his recent study of 74 problem loans originated by three lenders, Ronald Mann suggests that, "[g]iven the relative infrequency of bankruptcy and liquidation even in the universe of distressed loans," the changes that would result from adoption of the subordination proposals "do not seem serious enough to have serious effects in the massive universe of cases in the market for loan origination." Mann, *supra* note 36 (manuscript at 80). Given the diversity of lenders and credit markets, the possibility that a subordination regime might not materially affect the extension of credit by some financiers in some markets is in no way inconsistent with the possibility that such a regime would materially affect existing or future financings by the same financiers in other markets or by those or other financiers in other markets.

⁴¹ The Federal Reserve Board's national survey of small business financing is likely to be an important source of data. See Rebel A. Cole et al., *Bank and Nonbank Competition for Small Business Credit: Evidence from the 1987 and 1993 National Surveys of Small Business Finances*, 82 FED. RESERVE BULL. 983, 983-85 (1996).

having borrowed \$100,000 (.8 x \$125,000) secured by all its assets. Assume further that the evidence shows that lenders in this market segment determine the amount of credit they are willing to extend by reference to the value of the collateral.⁴² Next, assume that, under normal credit policies that take into account the risks of loss under the existing full-priority regime, including the *de facto* partial subordination in bankruptcy, lenders have extended secured credit to the firms in the identified market segment in an amount equal to 80% of the value of the collateral.⁴³ Subordination rules increase the risk of loss to secured parties by allocating to competing creditors some or all of the collateral value. Thus, one would expect that under a subordination rule less secured credit would be extended. Assume that a given subordination rule, whose details for the most part need not concern us,⁴⁴ decreases the value of collateral to secured lenders in the identified market segment to such an extent that they would be willing to extend credit in an amount equal to 70% of the value of

⁴² The use of loan-to-value ratios appears widespread with respect to both real property and personal property collateral. In some instances, statutes set maximum loan-to-value ratios. See, e.g., MASS. GEN. LAWS ANN. ch. 175, § 63 (West 1987) (generally limiting mortgage loans by insurance companies to 75% of the fair market value of the real property securing the loan). In other credit markets, lenders set them. See, e.g., PETER H. WEIL, ASSET-BASED LENDING 237 (1989) (describing the "borrowing base" for an inventory financing as "a percentage of the value of the inventory at the lower of cost or market"). The Comptroller of the Currency, Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, and Office of Thrift Supervision have adopted a uniform rule requiring each supervised institution (national bank, state bank member of the Federal Reserve System, insured state nonmember bank, or savings association) to adopt and maintain real-property lending policies that establish "[p]rudent underwriting standards, including loan-to-value limits." See 12 C.F.R. § 34.62(b)(2)(ii) (1997) (Comptroller); *id.* § 208.52(b)(2)(ii) (Federal Reserve Board); *id.* § 365.2(b)(2)(ii) (Federal Deposit Insurance Corp.); *id.* § 560.101(b)(2)(ii) (Office of Thrift Supervision). Interagency guidelines provide supervisory loan-to-value limits that an institution's internal limits should not exceed. See, e.g., Interagency Guidelines for Real Estate Lending Policies, *id.* § 560.101 app.

⁴³ Bebchuk and Fried point to the fact that under current law (primarily Bankruptcy Code Chapter 11) secured claims receive a *de facto* subordination (arising out of, for example, delay, the automatic stay, unreasonably low collateral valuations, etc.). Bebchuk & Fried, *supra* note 3, at 911-13. But this shows only that the current obstacles to enforcing security interests in bankruptcy have not entirely eliminated the utility of collateral, as in our example. On the other hand, if current law were to extend a more friendly hand to secured claims in bankruptcy, then perhaps 85% or 90% financing, instead of 80%, might have been more appropriate in the example.

⁴⁴ One detail of the subordination rule does concern us. The example assumes that, under the applicable rule, a secured party may hold a fully secured claim in bankruptcy. For example, the rule might permit holders of unsecured claims to take collateral free of a security interest only to the extent necessary to provide them with a specified proportion of the debtor's assets. In contrast, the subordination rules that Bebchuk and Fried proffer preclude a creditor from ever being fully secured in bankruptcy. *Id.* at 905-11 (explaining the extent to which a secured claim is treated as unsecured under the "adjustable-priority" and "fixed-fraction priority" rules). The adverse consequences of being undersecured in bankruptcy lead us to expect that a subordination rule taking the latter approach would result in an even greater contraction of credit than we hypothesize in our example.

collateral. This suggests that each borrower would be likely to borrow \$87,500 ($.7 \times \$125,000$), or \$12,500 less than under the existing legal regime, and that, of the \$100,000,000 in aggregate credit extended under the existing regime ($\$100,000/\text{borrower} \times 1000 \text{ borrowers}$), \$12.5 million ($\$12,500/\text{borrower} \times 1000 \text{ borrowers}$) would not be extended under the subordination rule.⁴⁵ Now assume that 2%, or 20, of the 1000 borrowers enter bankruptcy and that the collateral retains its original value, \$125,000.⁴⁶ Of this value, \$37,500 ($\$125,000 - \$87,500$) would be available for distribution to unsecured creditors. Of the \$37,500, \$25,000 would have been available under the existing regime and an additional \$12,500 becomes available as a consequence of the subordination rule. Thus, under this scenario, aggregate secured credit decreased by \$12.5 million and the subordination rule put \$250,000 ($\$12,500/\text{borrower} \times 20 \text{ bankrupt borrowers}$) in the pockets of the unsecured creditors in bankruptcy.⁴⁷ The devil is in the numbers, of course, but resort to reliable data could inform the example.

The contraction of secured credit in the example would not necessarily result in the contraction of aggregate credit. For example, the increased debtor equity in collateral and the operation of the subordination rule in bankruptcy might permit the debtors to offset the reduction in secured credit with unsecured credit.⁴⁸ We think it extremely unlikely that any increases in unsecured credit would offset

⁴⁵ In fact, the reduction in aggregate credit extended to the identified firms may be even greater. Some loans that might be made on the basis of an 80% loan-to-value ratio might not be made at all under a partial subordination regime. For example, a firm might be unable to undertake a project if it is able to borrow \$70,000 rather than \$80,000. One could not determine from historical data alone how much less credit a lender would extend under a given subordination regime. It would be necessary to make estimates based not only on the data but also on the opinions of credit analysts and rating agencies as to how a specified subordination regime would affect credit decisions.

⁴⁶ The assumption about collateral value probably is unrealistic. Conventional wisdom is that the actual collateral value realized in bankruptcy frequently is less than the prebankruptcy estimated value. This is one reason why lenders often require a "cushion" of collateral value in excess of the secured debt. We make the assumption nevertheless in order to maximize the amount that a partial subordination rule would provide to unsecured creditors, thereby giving the benefit of the doubt against our hypotheses. Moreover, the fact that the value of a particular item or group of collateral exceeds the secured debt is not inconsistent with a debtor's insolvency or financial distress.

⁴⁷ More precisely, the subordination rule put *no more than* \$250,000 in the pockets of unsecured creditors in bankruptcy. The additional amount unsecured creditors recover depends on the amount of administrative expenses and priority claims. See Bankruptcy Code § 726(a), 11 U.S.C. § 726(a) (1994). We believe that it is reasonable to hypothesize this disparity between the amount of credit contraction (\$12.5 million) and the increased recoveries by unsecured creditors (\$250,000). The assumed lenders that rely on a loan-to-value ratio are risk averse and would reduce credit extensions by an amount greater than that necessary to offset precisely their expected losses.

⁴⁸ A reduction in the applicable interest rate that unsecured creditors charge also might result.

a material portion of the reduction of secured credit.⁴⁹ Inasmuch as secured creditors in the example insisted on reducing the amount of available credit, such an increase in unsecured credit would occur only if the unsecured creditors were materially less risk averse than the secured creditors.⁵⁰

From the perspective of efficiency, one must be concerned not only about the reduction in the amount of available credit that would result from adoption of a subordination proposal, but also about the nature of the projects that firms will refrain from undertaking as a consequence of the reduction. Thus, Bebchuk and Fried pursue their subordination proposal even though they agree that it would prevent certain loan transactions, and thus certain projects, from going forward. In part, they do so on the premise that subordination is "more likely to prevent the financing of an inefficient activity than an effi-

⁴⁹ As the following letter from a Deputy Associate Attorney General demonstrates, interested segments of the United States federal government appear to share our intuitions on this subject.

This letter responds to Professor Charles Mooney's request for comments on a [subordination] proposal

At the outset, we emphasize that—perhaps uniquely—we appreciate the concerns the proposal seeks to address. The federal government is frequently an involuntary, unsecured creditor as a result of its tax, environmental clean-up, pension protection and other similar regulatory and enforcement responsibilities. The prospect of failing businesses continuing to operate without the unencumbered resources necessary to comply with obligations imposed under the law threatens the effectiveness of many important federal and state statutes designed to protect public health

The proposed change to the Uniform Commercial Code thus responds to a serious problem that merits further study. Nevertheless, after conferring with numerous potentially affected federal agencies, we have concluded that this proposal, though admittedly well intended, should not be adopted

First, the effect of the proposal on the extension of credit needs further study. The proposal could have detrimental effects on many highly leveraged sectors of the economy, such as small business and agriculture. Secured lenders . . . might either reduce lines of credit, demand greater security, exact higher rates of interest or impose a combination of all three. To the extent that lenders react by demanding greater collateral, even more property of a borrower might become encumbered Ironically, unsecured creditors could be harmed to the extent that businesses that could otherwise survive and generate profits with the help of secured credit are forced out of business or into bankruptcy.

These economic burdens would be imposed on all borrowers, not only those who present the types of risks that the proposal seeks to address. As a result, the proposal, if adopted, may well reduce the availability of private credit to some sectors of the economy.

Letter from Francis M. Allegra, Deputy Associate Attorney General, United States Department of Justice, to Professor Geoffrey C. Hazard, Jr., Director, The American Law Institute (March 17, 1997) (on file with authors) (footnotes omitted).

⁵⁰ We realize, of course, that both the risk aversion and lending policies of creditors vary. See Mann, *supra* note 36 (manuscript at 55-59) (arguing that differences in risk preferences are the most plausible explanation for new lenders' willingness to extend credit to debtors whose existing lenders have decided to terminate the lending relationship).

cient one," and that their subordination scheme would prevent the financing of efficient activities only in "rather rare" situations.⁵¹

It is instructive to see why Bebchuk and Fried think this might be true. Although their discussion,⁵² which centers around a numerical example, is far from clear, Bebchuk and Fried's argument appears to run as follows. They hypothesize that under a full priority regime for security interests, a particular firm can borrow \$1,000,000, at an interest cost of \$80,000, in order to pursue a project with a "benefit to . . . shareholders equal to \$85,000."⁵³ They also assume that the firm has nonadjusting creditors that (if they could) would charge a risk premium of \$10,000 as compensation for additional risk.⁵⁴ Under a partial priority regime, then, they assert that the prospective secured lender would charge interest of \$90,000.⁵⁵ They believe that the project must be "inefficient," apparently because it would not be undertaken if the firm were required to compensate all creditors with an appropriate risk premium.⁵⁶ Consequently, they conclude that

⁵¹ Bebchuk & Fried, *supra* note 3, at 918, 920.

⁵² *Id.* at 917-21. Bebchuk and Fried's discussion of this example is not the centerpiece of their article. The discussion is, however, their principal consideration of the effects of their subordination proposals on investment and contraction of credit, the principal focus of this Article.

⁵³ *Id.* at 918. The meaning of "benefit to shareholders" is unclear. Bebchuk and Fried assume that the shareholders will use a portion of this "benefit" to pay interest to the secured creditor. *Id.* at 918-19. Apparently, then, the term means the net expected value of the project before paying interest to the secured creditor (but after paying interest to the unsecured creditor).

⁵⁴ *Id.* at 918.

⁵⁵ *Id.*

⁵⁶ *Id.* at 919. The example is troublesome in that the nonadjusting unsecured creditor is the government. Why Bebchuk and Fried consider the government to be nonadjusting is unclear, given the government's power to establish legal rules that adjust its risk as events transpire. For example, the government can enact a statute providing that every time a taxpayer grants a security interest, the government automatically acquires a lien *pari passu* on the encumbered asset to secure tax obligations. The use of the government in this example is troublesome also because the inefficiency turns on the notion that, were the government able to adjust to the firm's having incurred secured debt, it would not have become a creditor unless it received a particular rate of return. But what is the appropriate rate of return for the government? Finally, the foresight Bebchuk and Fried attribute to the firm in the example (the firm knows that it will earn \$85,000 if it borrows \$1,000,000 to pursue a project and will decline the project if its interest costs will exceed that amount) appears inconsistent with their (more plausible) assumption elsewhere that a firm has no certain knowledge concerning the wealth consequences of its actions. *Id.* at 894-95 (stating that a firm's commitment "not to inefficiently encumber [an] asset . . . would require that the firm know in advance that it would be inefficient to encumber particular assets"; it is a "reasonable assumption that it is difficult to acquire this knowledge in advance"). In Part II.B we develop our hypothesis that shifts in priority and liability rules like those in the subordination proposals are not likely to affect the behavior of debtors.

projects that firms are likely to undertake under full priority, but not under partial priority, are inefficient.⁵⁷

The firm's nonadjusting creditors cannot possibly suffer any harm from the new secured credit unless the firm in fact becomes insolvent and fails to pay the creditors' claims in full. They may be exposed to additional risk, but that risk will be converted into harm only as to creditors of debtors that actually fail.⁵⁸ Indeed, firms that are not likely to fail (say, 95%) and that do not actually fail (say, 98%) would be \$5,000 richer if presented with Bebchuk and Fried's choices under full priority. Thus, those firms' nonadjusting creditors actually may *benefit* from the financing.⁵⁹ Furthermore, the creditors of the firms that are likely to fail (say, 5%) or that do fail (say, 2%) are precisely the creditors that may benefit the most and may have the least to lose from a full-priority rule.

Bebchuk and Fried address only situations in which nonadjusting creditors would, if they could, extract a risk premium and in which, under partial priority, a secured creditor would remain willing to make a loan in the same amount, albeit with an additional risk premium. This incomplete vision fails to take account of many other situations, including those in which a secured creditor would refuse to

⁵⁷ In part because Bebchuk and Fried's example is so unclear, we do not explore its specifics. However, Carlson analyzes the example under alternative assumptions and argues that, under either alternative, Bebchuk and Fried fail to draw appropriate conclusions from the numbers they posit. Carlson, *supra* note 11 (manuscript at 75-79).

⁵⁸ See Stephen R. Perry, *Risk, Harm, and Responsibility*, in *PHILOSOPHICAL FOUNDATIONS OF TORT LAW 5* (David G. Owen ed., 1995) (explaining that risk is not harmful in itself). The relevant risk and harm relate to nonpayment of claims. However, an awareness of the risk of nonpayment could potentially impose some temporary disutility on a claimant that eventually is paid in full.

⁵⁹ See Harris & Mooney, *supra* note 2, at 2028-37; Schwarcz, *supra* note 3, *passim*. Bebchuk and Fried appear to believe, mistakenly, that the amount of risk premium that the creditors *would have* charged if they had been in a position to do so nevertheless harms the nonadjusting creditors, who are in fact paid in full. Bebchuk & Fried, *supra* note 3, at 894 ("Since the involuntary creditors do not have the opportunity to set the size of their claims to reflect the possibility [i.e., by charging a risk premium] of this \$7500 transfer [of value to a secured creditor], they would actually be 'hurt' by the creation of the security interest . . ."). Moreover, as Bebchuk and Fried acknowledge, many creditors that they include in the class of *nonadjusting* creditors actually are *adjusting*, or at least *imperfectly* adjusting, creditors. For example, no one can doubt that when a government sets tax rates it takes into account the likely uncollectible portions of the taxes. Similarly, many trade creditors with small claims take into account uncollectible accounts in setting the price and credit terms for their products or services. See *id.* at 894. They protect against loss by charging the bad credit risks less and the good credit risks more than would be the case if they analyzed the credit risk of each customer. Contrary to Bebchuk and Fried's claims, *id.* at 894-95, these result-adjusting creditors are not disadvantaged when their debtors give security. There may be wealth transfers from the debtors with better credit (who may pay inappropriately high interest rates) to those with poorer credit (who pay inappropriately low rates), but they do not necessarily reflect *ex ante* inefficiencies. Even "pure" tort creditors may be positioned to take risk into account in some ways, for example, through decisions about which products to buy, which areas in which to jog, and which airlines to fly.

extend credit altogether or would offer to extend a smaller amount of credit under a subordination regime. Not only is their analysis incomplete, it is unsatisfactory even on its own terms.

Bebchuk and Fried essentially propose to reduce risk by limiting the secured party's access to collateral in bankruptcy.⁶⁰ But if full priority in bankruptcy is wealth-enhancing, then adoption of their proposal will reduce the social benefits. Bebachuk and Fried, like many before them, proceed on the assumption that externalization of risk is *a priori* to be avoided.⁶¹ As Randal Picker has explained, however, whether externalizing risk is a good or bad thing is an empirical question.⁶² This is because the social benefits of a project include not only the return to the producer but also the consumer surplus a project creates, i.e., the aggregate amount by which the value of the project to consumers exceeds its cost to them. Unless legal rules designed to prevent externalization of risk take the consumer surplus into account, some activities having a positive net social value will not be undertaken. As Picker explains:

As soon as we abandon the assumption that [an entrepreneur] can capture all of the social benefit of her activities, we must also abandon our policy of full internalization. . . . Put differently, because some benefits from the project will almost necessarily be externalized, we need to allow some risk to be externalized.⁶³

Stated otherwise, complete internalization of risk—the premise underlying Bebachuk and Fried's argument—has no necessary connection with wealth maximization.

B. Effects of Full Priority for Secured Credit on Externalization of Risk and Debtor Behavior

As we outlined in Part I, several subordination proponents have argued that affording full priority for security interests in bankruptcy leads to suboptimal, inefficient precautions against risk.⁶⁴ We hypothesize that neither affording full priority to security interests nor moving to a subordination scheme has or would have a material effect on the level of risk and precaution that debtors undertake. The following discussion explains our hypothesis and considers the prospects for acquiring empirical evidence to support it.

⁶⁰ Bebachuk & Fried, *supra* note 3, at 859-67. The only way to eliminate the risk completely would be to make all security interests ineffective. We know of no one who advocates this approach.

⁶¹ *Id.* at 863-66 & n.26.

⁶² Randal C. Picker, Externalization 3 (Jan. 10, 1997) (unpublished manuscript, on file with authors).

⁶³ *Id.* at 4.

⁶⁴ See *supra* Part I.

Leebron examines the effects of a firm's capital structure and the Bankruptcy Code's priority rules on the externalization of tort risk in a world of limited shareholder liability, as under current law.⁶⁵ He offers three examples, each involving a biotechnology firm that holds assets of \$100 million and faces a small risk that a catastrophic event will result in \$200 million in tort liability.⁶⁶ He first assumes that the firm's capital structure consists of \$100 million in equity and no debt.⁶⁷ Inasmuch as the equity holders are at risk for no more than \$100 million under a limited-liability regime, the firm has externalized \$100 million of potential tort liability.⁶⁸ Leebron then posits that the firm has only \$50 million in equity and has borrowed \$50 million from a financial creditor.⁶⁹ In this case, the \$100 million in assets would be distributed pro rata to the holders of the \$250 million of claims.⁷⁰ The tort claimants would receive \$80 million, yielding a \$120 million shortfall, and the financial creditor would receive \$20 million, yielding a \$30 million shortfall.⁷¹ Compared to the first example, then, an additional \$20 million of tort liability has been externalized.⁷² Finally, Leebron varies the second example by assuming that the \$50 million of financial debt is fully secured.⁷³ Under that scenario, the financial debt would be paid in full, leaving \$50 million of assets for the \$200 million tort claimants and resulting in a \$150 million shortfall or \$150 million of tort liability that has been externalized.⁷⁴

Leebron's observations are not unconventional in economic analysis. As the potential tort claims absorb more risk and the equity holders face less, the stakes shrink for the latter. This is said to reduce the deterrent effects of tort liability and the precautions firms will take to avoid it. Apparently, Leebron thinks that the hypothetical debtor that acquires \$50 million of secured debt instead of \$50 million of equity

⁶⁵ Leebron, *supra* note 4, at 1636-49. Under a legal regime imposing unlimited shareholder liability, Leebron observes that the bankruptcy priority rules would be irrelevant, as the firms could not externalize tort risk unless their assets were insufficient to satisfy the claims. *Id.* at 1637-38 & n.216.

⁶⁶ *Id.* at 1639.

⁶⁷ *Id.*

⁶⁸ *See id.*

⁶⁹ *Id.*

⁷⁰ *See id.* at 1639-40.

⁷¹ *See id.* at 1640. Leebron apparently does not deem relevant the fact that until the tort liability actually materializes, the contingent liability would not be valued at \$200 million, but at a fraction of that amount, representing the likelihood that the liability would accrue.

⁷² *See id.*

⁷³ *Id.*

⁷⁴ *See id.*

will engage in behavior that is 50% more risky (the ratio of \$150 of externalized risk to \$100 of externalized risk).⁷⁵

Leebron advances four reasons that support subordinating financial creditors (both secured and unsecured) to tort claimants: (i) financial creditors can more easily diversify losses than tort creditors, (ii) decreasing the negative externality created by corporate limited liability will cause more efficient management decisions and "fewer unjustified tort risks," (iii) a subordination rule "would restore capital structure neutrality" for tort risks, and (iv) "creditors will have an increased incentive to monitor corporate tort risks."⁷⁶ We focus here on the second and fourth reasons, which together address incentives for firms to alter their behavior and take sufficient precautions against causing injury.⁷⁷ Leebron concludes that modifying bankruptcy priority rules by subordinating financial claims, including secured claims, to tort claims would reduce tortious behavior as well as increase assets available to satisfy claims.⁷⁸ The additional assets would result from financial creditors' monitoring assets.⁷⁹

Leebron's conclusions necessarily depend on an unstated assumption that contemporary tort law has a deterrent effect on solvent firms with no financial creditors—those whose shareholders have the most at stake.⁸⁰ But Leebron's assumption, which he leaves both unstated and unexamined, is problematic at best. Although no one

⁷⁵ Would it follow that if Leebron's hypothetical debtor had only \$5 million in equity and \$5 million in debt, it would be ten times less careful than a debtor with \$50 million in debt because it would have less to lose? Leebron does not explain whether he is making only relative comparisons, viewing externalized debt as it relates to total assets or total equity. We also note in passing that Leebron's hypothetical firms are likely to differ materially in respects other than their capital structures. Reasons other than fortuity or whimsy likely are responsible for one firm having no debt and another firm having debt equal to 50% of its total assets.

⁷⁶ *Id.* at 1643.

⁷⁷ As for the first reason, we note only that adjusting the priority of claims against an insolvent debtor seems unlikely to be the most effective or efficient method of spreading losses.

⁷⁸ *Id.* at 1643-50.

⁷⁹ *See id.* at 1644-45.

⁸⁰ Leebron (as well as LoPucki, Bebchuk, and Fried, who followed him) failed to examine the operation of and justifications for tort liability. Another advocate of tort creditor priority, however, has recognized that the priority debate cannot ignore the basis for tort liability itself and the operation of the liability system in practice. *See* Andrew Price, Note, *Tort Creditor Superpriority and Other Proposed Solutions to Corporate Limited Liability and the Problem of Externalities*, 2 GEO. MASON L. REV. 439 (1995).

This paper assumes that the American tort law system functions efficiently. Therefore, this paper assumes that the tort creditor problem poses a real problem which needs a solution beyond a change in the tort law system. However, it is quite possible that the tort creditor problem only exists because of misincentives in the American tort law system. In that case, it may be unreasonable to impose the costs of the following proposal on the business community, when a less expensive solution may be found in tort reform.

doubts that the potential for tort liability has some deterrent effects,⁸¹ the standard economic account of tort liability rules, based on externalization of risk and deterrence, has been roundly criticized and substantially discredited. Professor Stephen Sugarman's critique is particularly trenchant.⁸² Sugarman identifies two cognition-related weaknesses in the deterrence argument. He explains that many actors are uninformed of both the law (which will not surprise torts teachers) as well as the facts necessary to apply it.⁸³ As Sugarman points out, no one could really expect market actors to understand fully either the details of the liability rules or the particular kinds of behavior that violate those rules.⁸⁴ Individuals—on their own account or as managers of firms—simply cannot determine with reasonable certainty whether particular conduct will create liability. Thus, not only do solvent firms commit torts, but in many cases, incurring the liability is not in the interest of the tortfeasors. With hindsight, Ford might have been well advised to take additional precautions against dangerous gasoline tanks in Pintos. Taking additional precautions might have been in the best interests of Ford's management and shareholders alike. But how would Ford have been confident about the quantum of risk or that a range of precautions would be either inadequate or excessive? Sugarman further explains that, even when individuals and organizations recognize and act upon a risk, often they are incompetent to achieve success.⁸⁵ He also rebuts the argument that uncertainty itself necessarily leads to precaution.

Id. at 440-41 (footnote omitted). Price recognized that before one can reach the point of actually advocating the subordination proposals to lawmakers, one first must defend successfully the efficiency of the tort system. Having failed even to *recognize* this point, the subordination proposals obviously have not yet met this burden.

⁸¹ See Gary T. Schwartz, *Reality in the Economic Analysis of Tort Law: Does Tort Law Really Deter?*, 42 UCLA L. REV. 377, 378, 390-423 (1994) (setting forth a moderate form of the deterrence argument—tort law provides some meaningful deterrence, but much less than economists' formulae suggest).

⁸² STEPHEN D. SUGARMAN, *DOING AWAY WITH PERSONAL INJURY LAW* 3-24 (1989). Sugarman also critically examines the other commonly asserted accounts of tort law, principally compensation-based and justice-based rationales. *Id.* at 35-49, 55-68. Sugarman is not alone in his skepticism about deterrence theory. See, e.g., IZHAK ENGLARD, *THE PHILOSOPHY OF TORT LAW* 43-44 (1993); John A. Siliciano, *Corporate Behavior and the Social Efficiency of Tort Law*, 85 MICH. L. REV. 1820, 1820-22 (1987). Skeptics of the efficiency of existing tort law as a deterrent are not limited to those writing outside the law-and-economics tradition. See, e.g., Jason S. Johnston, *Punitive Liability: A New Paradigm of Efficiency in Tort Law*, 87 COLUM. L. REV. 1385, 1392 (1987) (proposing a system of higher liability standards and higher penalties in order to accommodate errors by decisionmakers "in interpreting the standard, or in resolving the factual issues," which, under current law, result in nonliability for some who fail to comply with the legal standard and liability for some who do comply).

⁸³ SUGARMAN, *supra* note 82, at 6-9.

⁸⁴ *Id.*

⁸⁵ *Id.* at 8-9. Sugarman also identifies other factors that undermine the deterrent effect of tort law: (i) the tendency to discount threats of liability, (ii) the high stakes of

[F]or most potential defendants, liability insurance . . . has largely vitiated this argument. Besides, many parties will simply ignore the tiny possibility of a crushing financial loss in the way that people or companies ignore the chance that they might be killed or destroyed by an unexpected natural disaster. Alternatively, if they dwell on this risk, people are apt to develop socially undesirable defense strategies or to exercise excessive caution and fail to engage in socially beneficial activities. Finally, even if enterprises and individuals were to try to respond to an indeterminate likelihood of crushing liability, they would not know what amount of precaution to take.⁸⁶

In sum, neither firms nor the individuals who manage them are the fully informed, rational actors that Leebron would hope them to be.

If the threat of liability under the rippled surface of law and fact *generally* serves as a poor (or, at best, a crude) deterrent, in part as a result of the cognitive issues that Sugarman advances, it follows that tinkering with the edges of bankruptcy priority rules could not possibly provide an effective one. If a firm's management cannot accurately predict the results of taking or failing to take particular precautions, it is even more unlikely that management could create material reductions in risk by taking into account the amounts of the firm's unsecured debts and secured debt as they relate to the firm's capital.⁸⁷ And if management is not likely to react predictably and accurately to these marginal externalizations of risk, then the claim that monitoring by financial creditors will somehow play a meaningful role in directing behavior is virtually self-refuting.⁸⁸

potentially dangerous activity, (iii) the likelihood that in fact only a small penalty will be exacted for tortious behavior, and (iv) the effect of liability insurance. *Id.* at 9-18.

⁸⁶ *Id.* at 8. Arguably, Leebron recognized that uncertainty might play a role in the analysis, but he did not consider it. Leebron, *supra* note 4, at 1636 n.212 (acknowledging that his article does not address the possible effects of fact-finding uncertainty).

⁸⁷ See Schwartz, *supra* note 81, at 379 ("[L]egal economists [should] de-emphasize their efforts to fine-tune liability rules in order to achieve perfect deterrence. Given the imprecision in the processes by which tort liability affects behavior, these efforts at fine-tuning, though intellectually challenging, are likely to be socially irrelevant."). That tort law is such a blunt deterrent does not prove the desirability of current law, which generally provides for full priority of security interests. However, it illustrates that any differences in deterrence between current law and the subordination proposals would be trivial. We re-emphasize that we do not question that managers of firms appreciate the potential for tort liability and take precautions based on that appreciation. What we question is the prediction that the shifts in priority rules contemplated by the subordination proposals would materially affect actual behavior. Although leverage, whether secured or unsecured, may create an opportunity for managers to externalize risk, we doubt that managers in fact could accurately calculate, compare, and take account of these marginal externalizations of risks.

⁸⁸ We reserve for another day any comment on the asset monitoring that Leebron contemplates financial creditors will provide under a subordination regime. We note, however, that anecdotal evidence suggests that, even under the current full-priority re-

We do not dispute that when equity holders, management, or financial creditors have much at stake, the level of precaution and monitoring may be materially more significant than when they have little at stake. What we question, however, is whether variations in the prospects that third parties will be required to absorb tort liability can be translated into reliable and predictable variations in behavior.⁸⁹ Perhaps Leebron, LoPucki, Bebchuk, and Fried should focus their concerns on the continued operation of businesses whose owners and managers may have relatively little to lose, such as insolvent or nearly insolvent firms. Professor Siliciano makes the point well:

[T]ort reform holds limited potential for correcting the problems caused by evasive behavior. New rules generate new evasions. And although compliance may increase marginally with each expansion of liability rules, such improvements are likely to be offset, at least in part, by the decreased efficiency of transactions designed to avoid the new rules. Moreover, even with global rules, tort's basic mechanism for controlling conduct—the threat of future liability—is inherently limited. The effectiveness of such a final threat ultimately depends on whether the actor has something to lose. But tort law is powerless to guarantee that actors will want to, or be able to, stay in business. Put more crudely, the law is powerless to ensure that all actors make enough money so that they are concerned about the prospect of losing it through liability judgments. Thus, even if tort law could proscribe all lesser evasions, it can do little to alter the conduct of enterprises entering the final, natural refuge of insolvency.⁹⁰

We do not take lightly efforts to curb the problems associated with the operation of undercapitalized and insolvent firms. Nevertheless, we suspect that it is extremely unlikely that adjustments in the priority rules for secured debt would provide an effective remedy for this

game, secured creditors are hardly indifferent about whether their debtors incur tort liability.

⁸⁹ We also question whether internalizing tort costs necessarily maximizes wealth. Traditional economic analyses, like those undertaken by Leebron, *supra* note 4, LoPucki, *supra* note 2, and Bebchuk & Fried, *supra* note 3, propose to deter through tort law all conduct that causes a loss to victims that is greater than the costs of preventing or spreading the loss. However, this analysis is deficient because it fails to take account of all the social benefits of the tortious conduct. See Picker, *supra* note 62, at 3-6.

⁹⁰ Siliciano, *supra* note 82, at 1859 (footnote omitted). LoPucki recently elaborated on the various means by which judgment-proofing strategies can be achieved under long-standing legal principles. Lynn M. LoPucki, *The Death of Liability*, 106 YALE L.J. 1, 14-38 (1996). The issues of (1) whether American businesses have begun to utilize judgment-proofing strategies with increasing frequency and (2) whether those businesses are likely to continue to use those strategies in the future has been the subject of some debate. Compare *id.* (arguing that judgment-proofing has become increasingly commonplace and is likely to become even more so in the future) with James J. White, *Ignorant and Unashamed* (1997) (unpublished manuscript, on file with authors) (arguing that widespread judgment-proofing by commercial firms is only theoretically possible).

problem.⁹¹ A more likely candidate for reform is the most obvious source of *responsibility* for perpetuating insolvent firms' operations—Chapter 11 of the Bankruptcy Code.

Empirical testing of our hypotheses concerning the behavioral effects (or lack thereof) of both current law and a subordination regime will be enormously difficult.⁹² One initial approach that we intend to explore is the examination of relevant literature and data from the cognitive sciences, decision theory, and management studies.⁹³ In a recent paper, Cass Sunstein has made a compelling argument for further behavioral research in the analysis of law, and in particular in the economic analysis of law.⁹⁴ We also might consider a more forensic study of data concerning actual debtors that have and have not incurred material tort liability. At this point, we can note only our pessimism about ascertaining likely behavioral effects of capital and debt structure from such data. We contrast this pessimism with our considerably more optimistic views about demonstrating the likely effects of a subordination rule on the availability of credit. In addition to the availability of more accessible and relevant data, we expect to find that the bases for decisions concerning requests for extensions of credit from professional creditors are substantially more standardized, formalized, and memorialized.

⁹¹ Stated otherwise, we hypothesize that the positive externalities that Leebron, LoPucki, Bebchuk, and Fried would expect from adopting a subordination proposal would be minor.

⁹² See Siliciano, *supra* note 82, at 1821-22.

[The social efficiency] model of tort law posits that producers who might otherwise face inadequate incentives to act with care will, if saddled through liability rules with the costs of injuries caused by defective products, seek to reduce such costs to optimal levels in order to remain competitive. . . .

Indeed, the narcotic effect of the social efficiency model of tort is so strong that one easily forgets that it is simply a model, and one that has never been empirically tested. . . . [T]he most comprehensive study of corporate responses to tort liability found that the actual operations of the tort system, rather than encouraging producers to take optimal care, instead produced only an "indistinct signal" largely devoid of useful guidance.

Id. (footnotes omitted). The study that Professor Siliciano relies upon is GEORGE EADS & PETER REUTER, *THE INST. FOR CIV. JUST., DESIGNING SAFER PRODUCTS—CORPORATE RESPONSES TO PRODUCT LIABILITY LAW AND REGULATION* (1983). Professor Siliciano observed that "[t]esting of the model may be impossible" and expressed doubt whether "the end result of such efficiency-enhancing moves will be a system capable of optimizing product safety." Siliciano, *supra* note 82, at 1821 n.4 (citing William M. Landes & Richard A. Posner, *A Positive Economic Analysis of Products Liability*, 14 J. LEGAL STUD. 535, 551-53 (1985) (concluding that courts move from less efficient to more efficient rules as circumstances dictate)).

⁹³ See Albert W. Chau & James G. Phillips, *Effects of Perceived Control Upon Wagering and Attributions in Computer Blackjack*, 122 J. GEN. PSYCHOL. 253 (1995) (comparing probabilistic and cognitive theories of risk-taking behavior).

⁹⁴ Cass R. Sunstein, *Behavioral Analysis of Law*, 64 U. CHI. L. REV. (forthcoming 1997).

CONCLUSION

We have sketched our hypotheses concerning two significant aspects of proposals to subordinate secured claims to tort and other claims in bankruptcy: (i) the social costs of contraction of credit that might attend adoption of the subordination proposals, and (ii) the effects of adopting the subordination proposals on the externalization of risk and the (claimed) attendant increases in precaution. We also have outlined our current thinking about how to obtain empirical evidence to test our hypotheses. Our reflections have taken the subordination proposals on their own terms, based on their stated goals of enhancing efficiency and maximizing wealth. But the empirical investigation that interests us may suggest other normative considerations that adoption of the subordination proposals would implicate.

Consider the demographics of the group of debtors for which adoption of the subordination proposals would most likely cause reductions in extensions of credit. For example, data may confirm that small businesses (and, accordingly, minority-owned businesses) would disproportionately comprise that group.⁹⁵ Many observers would see that fact as support for a normative case against the subordination proposals, even if the proposals were demonstrably sound on efficiency grounds. Certainly those findings would explain the nearly universal lack of support for the subordination proposals in the current revision of UCC Article 9.

As a political matter, the subordination proposals have no realistic prospects for widespread support and adoption. Entrepreneurship is an indelible feature of the American social fabric. Even assuming that hiking the price of admission to the business marketplace would promote efficiency, so that only those with substantial unleveraged capital could afford to participate (a dubious assumption), many—perhaps most—would shrink from the prospect. In the end, the

⁹⁵ Conventional wisdom holds that smaller businesses are more likely to obtain secured credit than larger businesses. The results of the recently published survey, conducted by the Board of Governors of the Federal Reserve System, bears this out. Board of Governors of the Federal Reserve System, *1993 National Survey of Small Business Finances* (visited Sept. 24, 1997), <<http://www.bog.frb.fed.us/boarddocs/surveys>>. The size of a business bears a high correlation with the presence of collateral in financing the business, with smaller businesses more likely to give security. Telephone Interview with Rebel A. Cole, Board of Governors of the Federal Reserve System (May 29, 1997). Minority ownership of a business also correlates highly with size; minority businesses generally are smaller. *Id.* It is plausible to hypothesize that the reduction of credit following adoption of a subordination scheme would fall disproportionately on businesses owned by women and members of racial minorities. We have not tested this hypothesis here, and the data do not necessarily prove this hypothesis. Our point is more basic. Proponents of law reforms that, if adopted, would reduce available credit should take into account the likely victims of the reductions. We do not claim here, however, that current law is necessarily the optimal means of supporting small businesses.

needs and aspirations of the market participants—from the small businesses on Main Street to the economic engines on Wall Street—will prevail.⁹⁶

⁹⁶ Any serious approach to law reform, as opposed to scholarship for its sake alone, cannot ignore the political landscape. See Eric A. Posner, *The Political Economy of the Bankruptcy Reform Act of 1978*, 96 MICH. L. REV. 47 (1997) (analyzing the legislative and intellectual history of the Act from a public choice perspective); Mark J. Roe, *A Political Theory of American Corporate Finance*, 91 COLUM. L. REV. 10 (1991) (observing that American corporate ownership and management can be explained only by understanding prevailing political influences, such as concerns about permitting financial institutions to invest in and control industrial firms). Well intentioned as they may be, the subordination proposals are widely seen as a broadside assault on small business. See, e.g., Letter from Francis M. Al-legra to Geoffrey C. Hazard, Jr., *supra* note 49. We suspect that the data will bear this out.

